

Application No. 10/633,844
Attorney Docket No. 20712-0068

E.) REMARKS

This is a Response to the Office Action dated September 20, 2004.

Upon entry of this Amendment, claims 1-24 will be pending in the Application.

In the outstanding Office Action, the Examiner rejected claims 1, 4, 5 and 23 under 35 U.S.C. § 102(b) as being anticipated by Hackbart et al. (U.S. Patent No. 3,386,262) and objected to claims 2, 3, 6-22 and 24 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and intervening claims.

Rejection under 35 U.S.C. § 102

The Examiner rejected claims 1, 4, 5 and 23 under 35 U.S.C. § 102(b) as being anticipated by Hackbart et al. (U.S. Patent No. 3,386,262), hereinafter referred to as "Hackbart."

Specifically, the Examiner stated that

Hackbart discloses a refrigeration apparatus with dual compressors and comprising a suction connector (60) connect to the outlet of evaporator (20) and disposed in substantial flow alignment thereby inherently capable of disturbing vapor in an axial flow direction.

Applicants respectfully traverse the rejection of claims 1, 4, 5 and 23 under 35 U.S.C. § 102(b).

Hackbart, as understood, is directed to "having parallel circuited compressors in which means is provided for maintaining the oil sump of one compressor at a higher pressure than the oil sump of the other compressor so that excess oil in the one compressor may flow through an oil equalizer conduit to the other compressor; and means for directing a greater portion of the oil returned from the evaporator to the higher pressure oil sump." See Abstract. In other words, Hackbart is directed to resolving the unequal flow of oil from the evaporator to the two compressors. Applicants note that, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)." MPEP § 2141.03

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In contrast, claim 1 recites a suction connection for connecting a compressor and an evaporator in a refrigeration system, the suction connection comprising a protrusion extending into the evaporator upon installation of the suction connection, the protrusion being configured and disposed to disturb axial flow of refrigerant vapor in the evaporator. (Emphasis added).

In contrast, claim 23 recites a multiple compressor refrigeration system comprising: two or more compressors; a condenser in fluid communication with the two or more compressors; an evaporator in fluid communication with the condenser; a suction connection connecting the evaporator and the two or more compressors, the suction connection comprising at least one protrusion extending into the evaporator; and wherein the evaporator is configured to develop axial flow of refrigerant vapor adjacent to the suction connection and the at least one protrusion being configured and disposed to disturb the axial flow of refrigerant vapor in the evaporator. (Emphasis added).

To begin, at least one feature recited by Applicants in independent claim 1 is not taught or suggested by Hackbart. First, Hackbart does teach or suggest a protrusion extending into the evaporator upon installation of the suction connection, the protrusion being configured and disposed to disturb axial flow of refrigerant vapor in the evaporator. The Examiner references a suction connector 60 connected to the outlet of the evaporator. Hackbart specifically characterizes connector 60 as a "T or Y-shaped connector" as is commercially available. These connectors merely bifurcate incoming flow to the outgoing legs of the connector, and specifically lack any protrusion, as the purpose of the connector is to facilitate, not restrict, flow through the connector. The flow restriction in Hackbart is caused by a crimp 72 in the suction line leading to compressor 26. The crimp 72 cannot be characterized as a protrusion. Additionally, neither the connector 60 or crimp 72 extends into the evaporator 20, as it is the connector 60 that bifurcates the flow of fluid from the evaporator 20 to each of the compressors 24, 26. Further, it is noted that the purpose of Hackbart is to better allocate oil for lubrication of two compressors to extend the life of the compressors, not for purposes of affecting the operation of the system.

Next, it is noted that the Examiner's rejections relies on the doctrine of inherency. MPEP 2112 sets forth the law on inherency. Inherency is not to be taken lightly and not to be asserted unless there is good evidence to suggest that the asserted property or characteristic is necessarily

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present in the teachings of the prior art reference. The concept of inherency is not provided as a way to fill in the gaps in missing disclosure or teachings based upon speculation, unless the asserted property or characteristic may be shown to be necessarily present by objective evidence. Instead, "inherency" is used when every aspect of the disclosure of a reference and the claimed subject matter are otherwise exactly the same, then it may be inferred that some property or characteristic further recited in the claim must necessarily be present in the art reference. (Emphasis added). MPEP 2112 provides "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). (emphasis in MPEP). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted) "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)." (emphasis in original).

Applicant respectfully disagrees with the Examiner's conclusion that the connector 60 in Hackbart can inherently disrupt axial flow in the evaporator as recited by Applicant in independent claims 1 and 23. Applicant submits that a "T" or "Y" connector located externally to the evaporator cannot inherently disrupt axial flow within the evaporator.

The Examiner is requested to provide the basis in fact or technical reasoning that Hackbart's device disturbs axial flow of refrigerant vapor in the evaporator. There is nothing in Hackbart to support this assertion. In Hackbart, the evaporator has a single suction line leading from the evaporator to the T or Y connection disposed outside the evaporator. The T or Y connection then leads to both the first and second compressors and the suction pressure to the first compressor may be decreased with respect to the suction pressure of a second compressor.

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because of a crimp in the suction line to the first compressor. However, in any event Hackbart does not "inherently" suggest that the axial flow of refrigerant vapor in the evaporator is disturbed.

For the reasons discussed above, Hackbart and the present invention cannot remotely be considered exactly the same in every aspect, and the doctrine of inherency cannot be inferred. Further, Hackbart conspicuously lacks a protrusion in the evaporator which is an explicit limitation in both independent claims 1 and 23. Therefore, for the reasons given above, independent claims 1 and 23 are believed to be distinguishable from Hackbart and therefore are not anticipated nor rendered obvious by Hackbart.

Dependent claims 4 and 5 are believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claims 4 and 5 recite further limitations that distinguish over the applied art. For example, dependent claims 4 and 5 recite features relating to the protrusion. That is, claim 4 recites the suction connection of claim 1 wherein the protrusion has a peripheral edge formed of at least one linear segment. Similarly, claim 5 recites the suction connection of claim 1 wherein the protrusion comprises at least one aperture. Hackbart does not teach or suggest a protrusion in the evaporator, much less the further limitations to a protrusion recited in claims 4 and 5.

In conclusion, it is respectfully submitted that claims 1, 4, 5 and 23 are not anticipated nor rendered obvious by Hackbart and are therefore allowable.

Allowable Subject Matter

The Examiner objected to claims 2, 3, 6-22 and 24 as being dependent upon a rejected base claim, but indicated that the claims would be allowable, if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response thereto, Applicants appreciate the Examiner's indication of allowable subject matter, with regard to claims 2, 3, 6-22 and 24 but believes that all of the claims are allowable for the reasons given above.

CONCLUSION

In view of the above, Applicants respectfully request reconsideration of the Application and withdrawal of the outstanding objections and rejections. As a result of the remarks presented

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herein, Applicants respectfully submit that claims 1-24 are not anticipated by nor rendered obvious by Hackbart and thus, are in condition for allowance. As the claims are not rendered obvious in view of the applied art, Applicants request allowance of claims 1-24 in a timely manner. If the Examiner believes that prosecution of this Application could be expedited by a telephone conference, the Examiner is encouraged to contact the Applicants.

The Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,

MCNEES, WALLACE & NURICK LLC

By



K. Scott O'Brian
Reg. No. 42,946
100 Pine Street, P.O. Box 1166
Harrisburg, PA 17108-1166
Tel: (717) 237-5258
Fax: (717) 237-5300

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